AMENDMENT NO. 1 JANUARY 2021

TO

IS 16192 (PART 2) : 2014 AUTOMOTIVE VEHICLES — WHEEL RIMS FOR TWO AND THREE WHEELED VEHICLES

PART 2 SHEET METAL WHEEL RIMS — METHOD OF TESTS AND REQUIREMENTS

(*First cover page, title*) — Substitute the following for the existing title:

‘भारतीय मानक

स्वचल वाहन — दो और तीन पहिए वाले वाहनों के लिए व्हील रिम

भाग 2 धातु-पत्र के व्हील रिम — परीक्षण पद्धतियाँ और अपेक्षाएँ

Indian Standard

Automotive Vehicles — Wheel Rims for Two and Three Wheeled Vehicles

Part 2 Sheet Metal Wheel Rims — Methods of Tests and Requirements’

Price Group 1

(*Page* 1, *title*) — Substitute the following for the existing title:

'Indian Standard

AUTOMOTIVE VEHICLES — WHEEL RIMS FOR TWO AND THREE WHEELED VEHICLES

PART 2 SHEET METAL WHEEL RIMS — METHODS OF TESTS AND REQUIREMENTS'

(*Page* 1, *clause* **1**) — Insert the following at the end of the clause:

'NOTE — This standard applies to the wheel rims of e-rickshaws/e-carts also.'

(*Page* 1, *clause* **2**) — Substitute the following for the existing:

'2 REFERENCE

The following standard contains provisions, which through reference in this text, constitute provisions of this standard. At the time of proposal, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below:

IS No.	*Title*
10694 (Part 1) : 2009	Automotive vehicles — Rims — General requirements: Part 1 Nomenclature, designation, marking and measurement (*second revision*)'

(*Page* 2, *clause* **4.2.3.4**) — Substitute the following for the existing:

'**4.2.3.4** *Test termination*

a) *For three wheeled vehicles*:

The wheel rim shall withstand a minimum of 18 000 load cycles without failure. Failure criteria shall be as follows:

1) Inability of the wheel rim to sustain bending moment, or

    2) A fatigue crack penetrating through a section of the wheel rim.

b) *For two wheeled vehicles:*

After being subjected to 100 000 cycles according to the dynamic cornering fatigue test specified above, there shall be no evidence of harmful cracks, significant deformation or any abnormal looseness at joints.'

(*Page* 3, *clause* **4.2.4.4**) ─ Substitute the following for the existing:

'**4.2.4.4** *Test termination*

The wheel rim shall withstand a minimum of 400 000 test cycles without failure. Failure criteria shall be as follows:

a) Inability of the wheel rim to sustain load, or
b) A fatigue crack penetrating through a section of the wheel rim.'

(*Page* 3, *clause* **6**) — Substitute the following for the existing:

'6 MARKING

6.1 Wheel rims shall be durably and legibly marked with the following:

a) Size designation as per IS 10694 (Part 1),
b) Name or trade-mark of the wheel rim manufacturer,
c) Date of manufacturing preferably in the form of year and month or year and quarter of the year (for example 2009 indicates Sept 2020; 20 IV indicates fourth quarter of 2020); and
d) The letter 'HD' for rims designed for three wheeled goods carriages.

6.2 The markings shall be made as per 4 of IS 10694 (Part 1).

6.3 BIS Certification Marking

The product(s) conforming to the requirements of this standard may be certified as per the conformity assessment schemes under the provisions of the *Bureau of Indian Standards Act*, 2016 and the Rules and Regulations framed thereunder, and the product(s) may be marked with the standard mark.'

(*Page* 4, *clause* **A-1**) — Substitute the following for the existing:

'**A-1** To permit a uniform application of the test methods specified, the test factors given in the following table should be used when conducting the tests:

Test	*Accelerated Test Factors*
Dynamic cornering fatigue	$\mu = 0.7$
(*see* **4.2.3.3**)	$S = 1.60$
Dynamic radial fatigue	$K = 2.25$
(*see* **4.2.4.3**)	

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(TED 07)

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